

PATENT
100390-09170

2002 ("Final Official Action"). The September 26, 2002 Amendment was not entered by the Examiner. An appeal brief was due two months from October 1, 2002 or on December 1, 2002. However, Applicants hereby submit this Amendment to the Examiner which places the application in condition for allowance. Applicants hereby submit an accompanying Petition for a One Month's Extension of Time. It is believed that no additional fees are due for the entry of this Amendment, however, the Commissioner is hereby authorized to charge Deposit Account No. 50-0540 for any deficiency or to credit any overpayment.

In response to the Advisory Action and the Final Official Action under provision 37 C.F.R. § 116 please amend the above-identified application as follows:

IN THE CLAIMS

37. (Thrice Amended) A method for determining the time course of a reaction in which at least one reactant is converted to one or more products, said method comprising:

- (a) forming a composition containing said reactant and a luminophore, wherein
 - (i) the reactant reacts to form a reaction product;
 - (ii) the luminophore is capable of being induced to emit an electrochemiluminescence signal, wherein electrochemiluminescence emitted by said luminophore is affected by said reaction; and
 - (iii) the electrochemiluminescence signal emitted upon exposure of said composition to electrical energy changes as the reaction progresses; and
- (b) exposing the composition to electrical energy at selected time intervals and measuring the electrochemiluminescence signal during said selected time intervals [to determine the time course of the reaction]; and

PATENT
100390-09170

- D1 cont'd
- (c) [calculating the time course of the reaction from] relating the ECL signals measured in step (b) to the concentration of said reactant or said product to determine the time course of said reaction.

D2 ✓ 76-93. Please cancel

Please add the following new claims:

-- 94. (New) A method for determining the time course of a reaction in which at least one reactant is converted to a product comprising:

- D3
- (a) forming a composition containing said reactant, a reaction partner and a luminophore, wherein:
- (i) said reactant reacts with said binding partner to form said product; and
- (ii) the luminophore is capable of being induced to emit an electrochemiluminescence signal;
- (b) exposing said composition to a series of a pre-selected potential voltage pulses of pre-selected duration at pre-selected intervals of time to produce a modulated electrochemiluminescence signal, wherein said electrochemiluminescence signal is produced under reaction conditions which relate the concentration of said reactant or said product to the intensity of said electrochemiluminescence signal;
- (c) measuring said modulated electrochemiluminescence signal; and
- (d) determining the time course of said reaction by demodulating said modulated electrochemiluminescence signal.

PATENT
100390-09170

95. (New) A method for determining the time course of a binding reaction of a reactant and a binding partner comprising:

- (a) forming a composition containing said reactant, said binding partner and a luminophore, wherein:
 - (i) said reactant binds said binding partner to form a complex; and
 - (ii) said luminophore is capable of being induced to emit an electrochemiluminescence signal;
- (b) exposing said composition to a series of pre-selected potential voltage pulses of pre-selected duration at pre-selected intervals of time to produce a modulated electrochemiluminescence signal, wherein said electrochemiluminescence signal is produced under reaction conditions which relate the concentration of said reactant or said complex to the intensity of said electrochemiluminescence signal;
- (c) measuring said electrochemiluminescence signal; and
- (d) determining the time course of said binding reaction by demodulating said modulated electrochemiluminescence signal.

96. (New) A method for determining the time course of an enzymatic reaction comprising:

- (a) forming a composition containing an enzyme, enzyme substrate and a luminophore, wherein:
 - (i) said enzyme converts said substrate to a reaction product;